

# **PM-1 DIGITAL PRESSURE INDICATOR**



- 3 1/5 digit display
- LED is visible in almost any application environment
- Compatible with Proportion-Air electro-pneumatic valves and transducers.

# **DESCRIPTION**

The PM-1 is a digital indicator calibrated to provide a direct pressure output from the Proportion-Air electropneumatic control valve's analog monitor and transducers. The meter features a large (0.56" high) LED display that is visible in virtually any light or industrial environment. Designed for industrial process control use, the PM-1 is unaffected by virtually any vibration effect.

## **CONNECTION PROCEDURE**

Terminal locations on Figure 1

PM-1-E Voltage Signal 0-10vdc

- Connect the Supply Power screw terminal to 200mA power supply
- Signal and Supply Common screw terminal to DC Common
- Signal screw terminal to the signal output of Proportion-Air electro-pneumatic control or transducer.

#### PM-1-I Current Signal 4-20mA

- Connect the Supply Power screw terminal to an isolated 200mA power supply
- Signal and Supply Common screw terminal to the negative side of the loop and DC common
- Signal screw terminal to signal output of Proportion-Air electro-pneumatic control valve\* or transducer.

\*The Proportion-Air electro-pneumatic control valve standard 4-20mA analog output is sinking, requiring an external power source. This prevents the use of a standard QBxxFxC or BBxxFxC unit with the PM1-I. S216 on BB and S589 on QB provide a power source for the meter and are required for proper interface to a PM1-I.

# **SPECIFICATIONS**

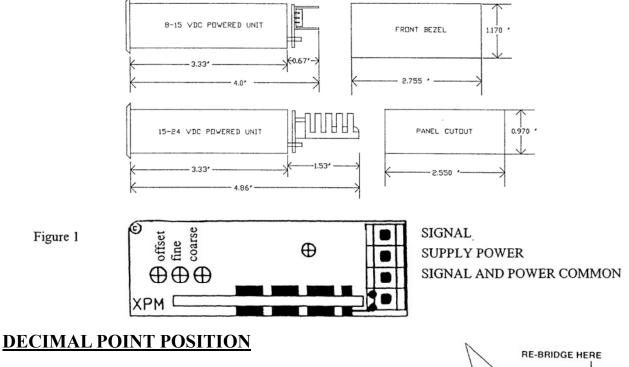
Power requirements	Maximum 200mA		
standard	12-15vdc range		
optional S566	15-24vdc range		
Input Impedance	1 MegOhm Minimum		
Input Protection	+-400VDC/280VAC		
Full Scale Range	+-1999, user selectable decimal		
-	position		
Normal Mode Rejection	>50dB above 50Hz		
Accuracy	+-(0.05%  of reading + 2  digits)		
Maximum Resolution	1mV over +-1999 counts		
Temperature Coefficient	100ppm/C typical		
Conversion rate	3 readings per second		
Overload indication	When input exceeds full scale,		
	meter blanks all but most		
	significant "1" digit and		
	polarity signal		
Zero Stability	Autozero, 0.1 counts/C typical		
Warmup Time	1 minute to specified accuracy		
Operating Temperature	0 to 60 C (32 to 140 F)		
Display	0.56" high efficiency LED		

# **CALIBRATION INFORMATION**

The meter is normally pre-calibrated at the factory, and the need for further calibration upon installation is unlikely. However, for periodic recalibration the following information is provided.

Locate the potentiometers in the rear of the unit (see Figure 1). The potentiometers are OFFSET for zero adjustment, FINE and COARSE for span adjustment. The OFFSET adjustment will not allow display of negative values.

## **DIMENSIONS**



The decimal point position can be specified when ordered. To turn off unwanted decimals, use a long-nosed pliers to scrape off the fine tracks connecting decimals to decimal select common (see Figure 2). Reconnect by soldering where shown. Figure 2



# **HOW TO ORDER**

<u>PM - 1</u>	- 100	<u> </u>	<u>S566</u>
Panel Version Meter	Pressure	Input Signal	Option S566
	Range	E = $0-10$ vdc	15-24vdc
	0-100 psig	I = $4-20$ mA	Power supply

Proportion-Air products are warranted to the original purchaser only against defects in material or workmanship for one (1) year from the date of manufacture. The extent of Proportion-Air's liability under this warranty is limited to repair or replacement of the defective unit at Proportion-Air's option. Proportion-Air shall have no liability under this warranty where improper installation or filtration occurred. All specifications are subject to change without notice. THIS WARRANTY IS GIVEN IN LIEU OF, AND BUYER HEREBY EXPRESSLY

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WARNING: Installation and use of this product should be under the supervision and control of properly qualified personnel in order to avoid the risk of injury or death.

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